Objective:
Needs Based Planning is a population health approach to resource and service allocation decisions. Disorder prevalence from the literature can be used to ground the estimation of need. However, to obtain an overall estimate of need for a given population, prevalence of mental and substance use disorders (MHSU) cannot be summed, as that would lead to double counting. Overall cases need to be adjusted for comorbidity. This can be done by obtaining disorder specific prevalence and odds ratios of disorder pairings, or by using individual-level survey data by disorder and overall to obtain adjustment factors, among other methods. We determined the total prevalence of MHSU adjusted for comorbidity in British Columbia and compared adjustment factors across several sources.

Method:
Data from the following surveys were accessed: Canadian Community Health Survey (CCHS), the National Institute on Alcohol Abuse and Alcoholism, and the Collaborative Psychiatric Epidemiology Surveys. Odds ratios from CCHS and prevalence from the literature were used to calculate total prevalence of MHSU adjusted for comorbidity. We also established the percentage of co-occurrence across substance use disorders (SUDs), across mental disorders (MDs) and across MHSU combined and compared these across surveys.

Results:
Total MHSU adjusted for comorbidity represents 22.6% of the population. Adjustment factors were concordant across surveys: adjustment factor for comorbid SUDs ranged 0.84–0.85; for comorbid MDs ranged 0.78–0.79; and for any MHSU was 0.93.

Conclusions:
We suggest an approach to calculate total prevalence of MHSU adjusted for comorbidity where adjustment factors obtained were concordant across surveys.